

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 14

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ROBERT GEORGE SYVRET

Appeal No. 2003-0052
Application No. 09/782,268

ON BRIEF

Before GARRIS, WARREN, and POTEATE, Administrative Patent Judges.
GARRIS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the final rejection of claims 1-13 which are all of the claims in the application.

The subject matter on appeal relates to a continuous process for preparing bis(fluoroxy)difluoromethane which comprises passing F₂ with CO₂ through a fluorination catalyst at a pressure

Appeal No. 2003-0052
Application No. 09/782,268

above atmospheric pressure. This appealed subject matter is adequately represented by independent claim 1 which reads as follows:

1. A continuous process for preparing bis(fluoroxy)difluoromethane (BDM), comprising passing F_2 with CO_2 through a fluorination catalyst, at a moderate temperature and a pressure that is above atmospheric pressure.

The reference set forth below is relied upon by the examiner as evidence of obviousness:

Fifolt	4,499,024	Feb. 12, 1985
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All of the claims on appeal stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Fifolt.¹

We refer to the brief and to the answer for a thorough discussion of the respective positions advocated by the appellant and by the examiner concerning this rejection.

OPINION

We will sustain the examiner's Section 103 rejection for the reasons set forth in the answer and below.

¹On page 2 of the brief, the appellant has stated that claims 1, 5, 6 and 9-13 are to be considered as one group and that claims 2-4, 7 and 8 are to be considered as a second group in relation to 37 CFR § 1.192(c)(7)(2001). Therefore, in assessing the merits of the above noted rejection, we will consider the appealed claims in accordance with the appellant's aforementioned grouping thereof.

Fifolt teaches a continuous process for preparing the here claimed product by passing F_2 with CO_2 through a bed of cesium fluoride catalyst. Patentee is silent regarding the pressure at which his method is practiced. Thus, the sole distinction of claim 1 over Fifolt is the requirement that the claimed process be conducted at a pressure above atmospheric pressure.

It is conceivable that one having ordinary skill in this art would have effectuated the flow of gases through patentee's continuous reactor by applying pressure upstream thereof or by applying vacuum downstream thereof. For the reasons (e.g., as a convenient mechanism by which to achieve patentee's desired gas flow) expressed in the answer, the artisan would have been motivated to effectuate Fifolt's method by applying upstream pressure to the reactor. Moreover, the foregoing considerations reveal that the artisan would have recognized pressure as a result effective parameter in the method of Fifolt, and it is well established that the determination of workable or even optimum values for such a parameter would have been obvious to one with ordinary skill in the art. In re Woodruff, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990); In re Boesch, 617 F.2d 272, 276, 205 USPQ 215, 21 (Fed. Cir. 1980); In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Under these circumstances, we share the examiner's conclusion that it would have been prima facie obvious for an artisan to practice the method of Fifolt at pressures of the type here claimed (e.g., see appealed claims 1-4 and 7) which are above atmospheric pressure. In support of his contrary view, the appellant states that, "[i]n Example 1 (col. 2, lines 46-57), the effluent from the reaction was trapped in a metal trap cooled with dry ice and ethanol" and that "[t]his is considered vacuum conditions" (brief, page 2). However, the appellant has proffered no evidence in support of his last quoted conclusion. Further, as noted by the examiner in his answer, the conditions in patentee's trap would not create a vacuum in the reaction zone unless a closed system were utilized and the Fifolt reference contains no disclosure of a closed system. For these reasons, we discern no persuasive merit in the appellant's argument that the examiner has failed to establish a prima facie case of obviousness.

As further support for his nonobviousness position, the appellant refers to data in the subject specification which is characterized as showing unexpected results that rebut a prima facie case of obviousness. This data appears on specification

Appeal No. 2003-0052
Application No. 09/782,268

pages 7-13 and shows conversion results, for example via fluorine breakthrough data, which are superior at pressures above atmospheric pressure.

From our perspective, this nonobviousness evidence is deficient in a number of respects. First, based on the record before us, it is questionable whether the results shown by the specification data are properly characterizable as unexpected. We here emphasize that nowhere in his specification does the appellant characterize these results as unexpected. It is only the appellant's attorney in the brief who describes these results as unexpected. Under these circumstances, we view this specification data as merely representing the optimization of the parameter of pressure which would have been within the skill of and thus obvious to the artisan as previously discussed.

In any event, even if the aforementioned results were assumed to be unexpected, the evidence of nonobviousness proffered by the appellant would be inadequate to outweigh the examiner's reference evidence of obviousness. In this regard, we remind the appellant that evidence presented to rebut a prima facie case of obviousness must be commensurate in scope with the claims to which it pertains and that such evidence which is considerably more narrow in scope than the claimed subject matter

Appeal No. 2003-0052
Application No. 09/782,268

is not sufficient to rebut a prima facie case of obviousness. In re Dill, 604 F.2d 1356, 1361, 202 USPQ 805, 808 (CCPA 1979). The specification data under consideration is considerably more narrow in scope than the argued claims on appeal with respect to many parameters including catalyst, temperature, flow rate and reactant ratios. None of the appealed claims argued by the appellant are limited at all with respect to these parameters. For example, the specification data is based on the use of activated cesium fluoride catalyst whereas none of the argued claims on appeal is limited to cesium fluoride catalyst in any form and, of all the claims on appeal, none is limited to cesium fluoride catalyst which has been activated.

To summarize, in analyzing the propriety of the Section 103 rejection before us, we have determined that the examiner has established a prima facie case of obviousness and, thereupon, have considered the argument and evidence submitted by the appellant in assessing ultimate patentability based on the totality of the record by a preponderance of evidence with due consideration to persuasiveness of argument. In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). As a result of this analysis, it is our ultimate determination that the totality of the record before us weights most heavily in

Appeal No. 2003-0052
Application No. 09/782,268

favor of an obviousness conclusion. We shall sustain, therefore, the examiner's Section 103 rejection of all appealed claims as being unpatentable over Fifolt.

The decision of the examiner is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

BRADLEY R. GARRIS)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
CHARLES F. WARREN)	APPEALS AND
Administrative Patent Judge)	INTERFERENCES
)	
)	
LINDA R. POTEATE)	
Administrative Patent Judge)	

BRG:hh

Appeal No. 2003-0052
Application No. 09/782,268

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